05/03

#2



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/000,321

DATE: 01/26/2002 TIME: 13:42:58

Input Set : N:\Crf3\RULE60\10000321.raw
Output Set: N:\CRF3\01252002\J000321.raw

## SEQUENCE LISTING

```
3 (1) GENERAL INFORMATION:
             (i) APPLICANT: BRUST, Stefan
      6
                            KNAPP, Stefan
      7
                            GERKEN, Manfred
     8
                            GUERTLER, Lutz
     10
            (ii) TITLE OF INVENTION: Peptides derived from a retrovirus of
     11
                                      the HIV group, and their use
           (iii) NUMBER OF SEQUENCES: 11
     13
            (iv) CORRESPONDENCE ADDRESS:
     15
                  (A) ADDRESSEE: Foley & Lardner
     16
                                                         ENTERED
     17
                  (B) STREET: 3000 K Street, N.W., Suite 500
                  (C) CITY: Washington
     18
     19
                  (D) STATE: D.C.
                  (E) COUNTRY: USA
     20
     21
                  (F) ZIP: 20007-5109
     23
             (v) COMPUTER READABLE FORM:
                  (A) MEDIUM TYPE: Floppy disk
     24
     25
                  (B) COMPUTER: IBM PC compatible
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     26
                  (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
     27
     29
            (vi) CURRENT APPLICATION DATA:
C--> 30
                  (A) APPLICATION NUMBER: US/10/000,321
C--> 31
                  (B) FILING DATE: 04-Dec-2001
     32
                  (C) CLASSIFICATION:
     34
           (vii) PRIOR APPLICATION DATA:
                  (A) APPLICATION NUMBER: 09/131,551
     35
     36
                  (B) FILING DATE:
     38
          (viii) ATTORNEY/AGENT INFORMATION:
     39
                  (A) NAME: SANDERCOCK, Colin G.
     40
                  (B) REGISTRATION NUMBER: 31,298
                  (C) REFERENCE/DOCKET NUMBER: 58315/106/BEAK
     41
            (ix) TELECOMMUNICATION INFORMATION:
     43
                  (A) TELEPHONE: (202)672-5300
     44
     4.5
                  (B) TELEFAX: (202)672-5399
     46
                  (C) TELEX: 904136
     49
        (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     51
                  (A) LENGTH: 48 amino acids
     52
     53
                  (B) TYPE: amino acid
                  (C) STRANDEDNESS:
     54
     55
                  (D) TOPOLOGY: linear
     59
            (ix) FEATURE:
```

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Input Set : N:\Crf3\RULE60\10000321.raw Output Set: N:\CRF3\01252002\J000321.raw

```
60
                  (A) NAME/KEY: Modified-site
     61
                  (B) LOCATION: 29
     62
                  (D) OTHER INFORMATION: /note= "Xaa represents Cys or Ser"
            (ix) FEATURE:
     64
                  (A) NAME/KEY: Modified-site
     65
     66
                  (B) LOCATION: 35
                  (D) OTHER INFORMATION: /note= "Xaa represents Cys or Ser"
     67
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     70
     72
             Val Trp Gly Ile Arg Gln Leu Arg Ala Arg Leu Gln Ala Leu Glu Thr
     73
W--> 75
             Leu Ile Gln Asn Gln Gln Arg Leu Asn Leu Trp Gly Xaa Lys Gly Lys
     76
                                              25
W--> 78
             Leu Ile Xaa Tyr Thr Ser Val Lys Trp Asn Thr Ser Trp Ser Gly Arg
     79
                     35
                                          40
        (2) INFORMATION FOR SEQ ID NO: 2:
     82
             (i) SEQUENCE CHARACTERISTICS:
     84
                  (A) LENGTH: 23 amino acids
     85
                  (B) TYPE: amino acid
     86
     87
                  (C) STRANDEDNESS:
     88
                  (D) TOPOLOGY: linear
     94
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
             Asn Gln Gln Arg Leu Asn Leu Trp Gly Cys Lys Gly Lys Leu Ile Cys
     96
     97
                                                   10
     99
             Tyr Thr Ser Val Lys Trp Asn
     100
                           20
     102 (2) INFORMATION FOR SEQ ID NO: 3:
              (i) SEQUENCE CHARACTERISTICS:
     104
     105
                   (A) LENGTH: 26 amino acids
     106
                   (B) TYPE: amino acid
                   (C) STRANDEDNESS:
     107
     108
                   (D) TOPOLOGY: linear
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
     114
              Arg Leu Gln Ala Leu Glu Thr Leu Ile Gln Asn Gln Gln Arg Leu Asn
     116
                                                                         15
     117
     119
              Leu Trp Gly Cys Lys Gly Lys Leu Ile Cys
     120
                           20
     122 (2) INFORMATION FOR SEQ ID NO: 4:
     124
              (i) SEQUENCE CHARACTERISTICS:
     125
                   (A) LENGTH: 26 amino acids
     126
                   (B) TYPE: amino acid
     127
                   (C) STRANDEDNESS:
     128
                   (D) TOPOLOGY: linear
     134
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
             'Arg Leu Gln Ala Leu Glu Thr Leu Ile Gln Asn Gln Gln Arg Leu Asn
     136
     137
                                                                         15
     139
              Leu Trp Gly Ser Lys Gly Lys Leu Ile Ser
                           20
                                                25
     142 (2) INFORMATION FOR SEQ ID NO: 5:
              (i) SEQUENCE CHARACTERISTICS:
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144

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```
(A) LENGTH: 23 amino acids
145
146
              (B) TYPE: amino acid
147
              (C) STRANDEDNESS:
              (D) TOPOLOGY: linear
148
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
154
         Asp Gln Gln Leu Leu Gly Ile Trp Gly Cys Ser Gly Lys Leu Ile Cys
156
                         5
                                              10
157
         Thr Thr Ala Val Pro Trp Asn
159
                     20
160
162 (2) INFORMATION FOR SEQ ID NO: 6:
         (i) SEQUENCE CHARACTERISTICS:
164
165
              (A) LENGTH: 26 amino acids
              (B) TYPE: amino acid
166
167
              (C) STRANDEDNESS:
              (D) TOPOLOGY: linear
168
174
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
         Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln Gln Leu Leu Gly
176
                                              10
177
                         5
         Ile Trp Gly Cys Ser Gly Lys Leu Ile Cys
179
180
                     20
182 (2) INFORMATION FOR SEQ ID NO: 7:
         (i) SEQUENCE CHARACTERISTICS:
184
185
              (A) LENGTH: 26 amino acids
186
              (B) TYPE: amino acid
187
              (C) STRANDEDNESS:
188
              (D) TOPOLOGY: linear
194
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
         Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln Gln Leu Leu Gly
196
                          5
                                              10
197
199
         Ile Trp Gly Ser Ser Gly Lys Leu Ile Ser
200
                     20
202 (2) INFORMATION FOR SEQ ID NO; 8:
         (i) SEQUENCE CHARACTERISTICS:
204
205
              (A) LENGTH: 32 base pairs
206
              (B) TYPE: nucleic acid
207
              (C) STRANDEDNESS: single
208
              (D) TOPOLOGY: linear
214
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
216 TGTGTGGTAC CGCAGCGGCA ACAGCGCTGA CG
                                                                              32
218 (2) INFORMATION FOR SEQ ID NO: 9:
220
         (i) SEQUENCE CHARACTERISTICS:
221
              (A) LENGTH: 32 base pairs
222
              (B) TYPE: nucleic acid
223
              (C) STRANDEDNESS: single
              (D) TOPOLOGY: linear
224
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
                                                                              32
232 GTGTGTCTAG TTTAGTTATG TCAAACCAAT TC
234 (2) INFORMATION FOR SEQ ID NO: 10:
         (i) SEQUENCE CHARACTERISTICS:
236
```

RAW SEQUENCE LISTING DATE: 01/26/2002 PATENT APPLICATION: US/10/000,321 TIME: 13:42:58

Input Set : N:\Crf3\RULE60\10000321.raw
Output Set: N:\CRF3\01252002\J000321.raw

```
237
              (A) LENGTH: 146 amino acids
238
              (B) TYPE: amino acid
              (C) STRANDEDNESS:
239
              (D) TOPOLOGY: linear
240
246
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
248
         Ala Ala Thr Ala Leu Thr Val Arg Thr His Ser Val Leu Lys Gly Ile
249
         Val Gln Gln Asp Asn Leu Leu Arg Ala Ile Gln Ala Gln Gln His
251
252
         Leu Leu Arg Leu Ser Val Trp Gly Ile Arg Gln Leu Arg Ala Arg Leu
254
255
                                      40
257
         Gln Ala Leu Glu Thr Leu Ile Gln Asn Gln Gln Arg Leu Asn Leu Trp
258
         Gly Cys Lys Gly Lys Leu Ile Cys Tyr Thr Ser Val Lys Trp Asn Thr
260
261
                             70
                                                  75
263
         Ser Trp Ser Gly Arg Tyr Asn Asp Asp Ser Ile Trp Asp Asn Leu Thr
264
                         85
                                              90
266
         Trp Gln Gln Trp Asp Gln His Ile Asn Asn Val Ser Ser Ile Ile Tyr
267
                                          105
269
         Asp Glu Ile Gln Ala Ala Gln Asp Gln Glu Lys Asn Val Lys Ala
270
                                      120
         Leu Leu Glu Leu Asp Glu Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile
272
273
             130
                                 135
275
         Thr Lys
         145
276
278 (2) INFORMATION FOR SEQ ID NO: 11:
         (i) SEQUENCE CHARACTERISTICS:
              (A) LENGTH: 145 amino acids
281
              (B) TYPE: amino acid
282
283
              (C) STRANDEDNESS:
284
              (D) TOPOLOGY: linear
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
290
         Val Ser Leu Thr Leu Thr Val Gln Ala Arg Gln Leu Leu Ser Gly Ile
292
293
                                              10
         Val Gln Gln Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His
295
296
                                          25
298
         Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Val
299
301
         Leu Ala Val Glu Arg Tyr Leu Arg Asp Gln Gln Leu Leu Gly Ile Trp
302
304
         Gly Cys Ser Gly Lys Leu Ile Cys Thr Thr Ala Val Pro Trp Asn Ala
305
307
         Ser Trp Ser Asn Lys Ser Leu Glu Asp Ile Trp Asp Asn Met Thr Trp
308
                                              90
310
         Met Gln Trp Glu Arg Glu Ile Asp Asn Tyr Thr Asn Thr Ile Tyr Thr
311
                                          105
                                                              110
                     100
313
         Leu Leu Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu
314
                                      120
         Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe Ser Ile Thr
316
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/000,321

TIME: 13:42:58

DATE: 01/26/2002

Input Set : N:\Crf3\RULE60\10000321.raw Output Set: N:\CRF3\01252002\J000321.raw

317	130	135	140
319	Asn		
320	145		

VERIFICATION SUMMARY

DATE: 01/26/2002

PATENT APPLICATION: US/10/000,321

TIME: 13:42:59

Input Set : N:\Crf3\RULE60\10000321.raw
Output Set: N:\CRF3\01252002\J000321.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:78 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1